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REMARKS

The indication of claims 8-11 being allowed and claims 5, 7, 9 and 10 containing allowable subject matter is noted.

To expedite prosecution, Applicants cancel claims 3 and 37-48.

Claims 4 and 5 have been amended because claim 3, upon which they formerly depended, has been canceled. Claims 4 and 5 now depend on claim 6 and claim 9 now depends on claim 7. Claims 6, 31 and 36 have been amended slightly for clarity. Claim 49 has been combined with former claim 37, claim 50 has been combined with former claim 37 and claim 51 has been combined with former claim 43. In addition, a substantive amendment has been made to claim 51 to overcome the art rejection.

The foregoing amendments obviate the objections to claims 3, 9, 49, 50 and 51.

Claims 52 and 53 have been amended to indicate that a storage device, as well as a computer readable medium, has stored therein instructions for causing a processing unit to execute the methods of claims 50 and 51, respectively.

Applicants traverse the objection to claims 52 and 53. Applicants can not agree that the steps of claims 51 and 51 must be spelled out in claims 52 and 53. Claims 52 and 53 are clearly definite, as written. The Examiner is requested to indicate why

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the method steps of claims 50, 51 must be incorporated in claims 52 and 53. Citation of a decision supporting the position of the Examiner in this regard is requested, if the objection is repeated. Alternatively, the Examiner is requested to provide rationale as to why claims 52 and 53 must spell out the methods of claims 50 and 51.

Applicants traverse the rejection of claims 30, 49, 50 and 52 under 35 U.S.C., ¶ 1, as failing to comply with the enablement requirement. The office action states that the specification does not enable the requirement of claims 49 and 50 (upon which claims 30 and 52 depend) for "enabling reading of the resynchronization field." The office action states that the specification teaches away from the foregoing limitation at page 18, lines 29-32. A complete reading of the specification indicates the office action incorrectly characterizes the specification. A complete discussion of Figure 11, starting on page 15, line 17, indicates part a) of claim 49 refers to state 506, once the VFO has been detected. Part b) of claim 49 refers to moving from state 506 to state 502 once the forward synchronization field has been detected via one of the found synchronization 1 or found synchronization 2 paths. Once in state 502 data are read. Part c) of claim 49 deals with moving back to state 506, upon detection states 506 and

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502 being reached, i.e., the found strict resynchronization path. This is the path to which part c) of claim 49 refers.

Page 16, line 26, describes the operation in detail. The paragraph bridging pages 17 and 18 supports the existence of a path found strict resynchronization shown in Figure 11 by stating "as can be seen from Figure 11 detection of the whole resync pattern allows the state machine to move from the 'vfo detective' state 506 to the 'strict sniffing' state 502." As discussed in the paragraph bridging pages 15 and 16, a vfo pattern can occur at any time. If a vfo pattern is detected, processing moves to state 506. In particular, the specification states: "Vfo detection may occur unexpectedly (due to errors or drop-ins) at any point in the reading of a CPP; if this occurs, the vfo field is accepted and forward sync detection is enabled." Figure 11 also makes this evident because all of these states have an exit path to state 506 labeled (1), i.e., the highest priority exit found vfo.

From the above, the specification clearly discloses that the state machine moves from the "vfo detected" state to the "strict sniffing" state if the forward synchronization is missed and once the re-synchronization field is detected. Consequently, the position set forth in the office action that limitation "c)" in claims 49 and 50 is not enabled or discussed in the specification

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is incorrect. Based on the foregoing, examination of claims 49 and 50 and the claims dependent on them is in order.

Applicants traverse the rejection of claims 31-36 as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as their invention. The office action says the Examiner is unable to understand the limitations of the last two paragraphs of independent claims 31 and 36; claims 32-35 depend on claim 31.

Applicants are unable to understand what the Examiner can not understand about the next to last subparagraph of claims 31 and 36. The penultimate subparagraphs of claims 31 and 36 say one or more of the read synchronization fields is compared with a predetermined bit pattern. The synchronization field or fields include a field capable of having different bit configurations. In other words, the read synchronization fields can have different configurations and the synchronization fields are compared with a predetermined bit pattern.

The last subparagraph of each of claims 31 and 36 now more specifically indicates the bits of the predetermined bit pattern are changed so the bits of the predetermined bit pattern are the same as the bits of the one or more read synchronization fields which are capable of having different bit configurations. If the rejection of claims 31-36 is repeated, the Examiner is requested

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to indicate what is not understood by these limitations, which applicants note are supported in the specification, *inter alia*, on page 3, lines 15 and 16.

The anticipation rejection of claims 37, 38 and 41-48 based on Blaum et al., USP 5,999,110, is rendered moot by the cancellation of these claims.

Applicants traverse the rejection of claim 6 as being anticipated by Blaum et al. Claim 6 includes the requirement of detection of one of said forward sync fields or one of said back sync fields being qualified by determining that the forward or back sync field must be preceded by a predetermined pattern of data. The Examiner relies on column 6, lines 30-32 of Blaum et al. for the foregoing feature. However, the relied upon portion of Blaum states "As illustrated, no Hamming distance is closer than "9" before the synchronization pattern is detected." It is not seen how such a statement anticipates the foregoing limitation. Consideration of Blaum et al. indicates the vfo field and the sync field are concatenated; see, for example, column 2, lines 11-13, column 5, lines 4-7, and column 6, lines 49-52.

Claim 51, as amended, distinguishes over Blaum by requiring enabling reading of the forward synchronization field in response to detection of the presence of the predetermined pattern of the first non-user data without interaction with any forward or back

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synchronization fields of the medium. Further, claim 51 requires enabling reading of the back synchronization field in response to detection of the presence of the predetermined pattern of the second non-user data without interaction with any forward or back synchronization fields of the medium. Because of the concatenation performed by Blaum et al., the foregoing limitations of claim 51 are not disclosed by Blaum and are completely opposite from Blaum.

Applicants traverse the rejection of claims 4 and 15-19 as being obvious as a result of Blaum et al. and Malone, Sr., USP 5,940,233. Malone does not cure the deficiencies of claim 6, upon which claims 4 and 15-19 depend. Consequently, the rejection of these dependent claims is incorrect.

The rejection of claims 4 and 15-19 is also incorrect because Blaum et al. can not be modified to include the features of Malone, as set forth in claims 4 and 15-19. Claim 4, for example, requires detection of the predetermined pattern of data occurring at any point in a reading of the data to enable sync detection. Such a feature is not possible in Blaum because of the concatenation of the vfo and sync fields.

Claim 15 requires qualification of the sync pattern by using a window and considering as a true sync pattern any sync pattern detected while the window is open. A spurious sync pattern is

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considered to be any sync pattern detected while the window is closed. Malone uses the vfo for locking, not for sync detection. As previously discussed, Blaum concatenates the vfo with the sync field to create an expected pattern and a similar set of patterns which allow certain likely errors. Because Malone uses the vfo for blocking, rather than sync detection, one of ordinary skill in the art would not have combined the Malone and Blaum arrangements.

In Figure 7 of Malone, there is no control between the vfo block and the sync byte detector. As such, Malone has no disclosure of a vfo that can be used to qualify detection. Therefore, Blaum and Malone can not be combined because they relate to different types of devices. One of ordinary skill would not consider looking at art that does not relate to sync pattern detection when trying to solve the problem of how to detect a sync field in a better way than had been done in the prior art.

Use of the Malone window is also unclear. Apparently, Malone uses the window to determine whether to go into an error recovery mode with subsequent revolutions to look for a second sync byte. Thus, use of the window by Malone differs from the window of claim 15 that is used to qualify detection of a sync byte. Thus, Malone teaches away from a window for detecting the sync field and discloses that the window is only useful for detection of the second sync field once an error has occurred.

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Claim 16 depends on claim 15 and requires the window to be opened at a predetermined point. While the Malone window is open for a predetermined time, there is nothing to indicate the Malone window is opened at a predetermined point.

Claims 17-19 depend on claim 15 and are allowable therewith.

Applicants traverse the rejection of claims 20 and 21 as being obvious as a result of Blaum et al. and Malone, Sr. Firstly, the rejection is improper because Blaum et al. and Malone Sr. can not be properly combined, as discussed *supra* in connection with claim 15. Further, as discussed in connection with claim 15, one of ordinary skill in the art would not have modified Blaum et al. as a result of Malone to include the feature of qualifying sync pattern detection by using a window and considering as a true sync pattern any sync pattern detected while the window is open. In addition, one of ordinary skill in the art would not have combined Blaum and Malone, Sr. to qualify detection of a resync pattern by using the window, for reasons set forth *supra* in connection with claim 15.

Claim 21 requires sync detection to take place when data is read from the data-holding medium, before any further processing is carried out on the data.

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The rejection of claims 39 and 40 as being obvious as a result of Blaum in view of Buckingham et al. is rendered moot because claims 39 and 40 and canceled.

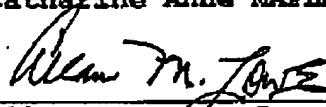
In view of the foregoing amendments and remarks, favorable reconsideration and allowance are respectfully requested and deemed in order.

Pursuant to 37 C.F.R. §1.136(a), Applicants hereby request a one-month extension of time in which to file this paper. Authorization for payment of the \$110 fee is attached. If in error, the Commissioner is hereby authorized to charge any omitted fees, including extension of time fees, to Deposit Account No. 07-1337.

Respectfully submitted.

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